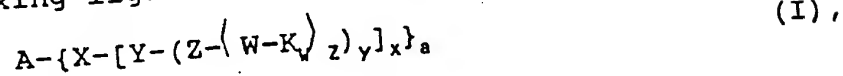


Abstract

Cascade polymer complexes that contain
 a) complexing ligands of general formula I



in which

A stands for a nitrogen-containing cascade nucleus
 of base multiplicity a,

X and Y, independently of one another, stand for a
 direct bond or a cascade reproduction unit of
 reproduction multiplicity x or y,

Z and W, independently of one another, stand for a
 cascade reproduction unit of reproduction
 multiplicity z or w,

K stands for the radical of a complexing agent,

a stands for numbers 2 to 12,

x, y, z and w, independently of one another, stand for
 numbers 1 to 4,

provided that at least two reproduction units are
 different and that for the product of the
 multiplicities,

$$16 \leq a \cdot x \cdot y \cdot z \cdot w \leq 64$$

holds true,

b) at least 16 ions of an element of atomic numbers 20 to
 29, 39, 42, 44 or 57-83,

c) optionally cations of inorganic and/or organic bases,
 amino acids or amino acid amides as well as

d) optionally acylated terminal amino groups
are valuable compounds for diagnosis and therapy.

ABSTRACT OF THE DISCLOSURE

Described are new cascade polymer complexes, compositions containing them and use of the complexes in diagnosis and therapy, particularly for magnetic resonance imaging and computer tomography imaging.